THE TECHNICAL UNIVERSITY OF KENYA

Haile Selassie Avenue, P.O. Box 52428, Nairobi, 00200, Tel +254(020) 343672, 2249974, 2251300, 341639

Fax 2219689, Email: vc@tukenya.ac.ke, Website: www.tukenya.ac.ke

NAME: DR BRIAN WESLEY MUGANDA

Faculty:	Social Sciences and Technology
School:	Business and Management Studies
Department:	Accounting and Finance
Current Designation:	Tutorial Fellow, ACCOUNTING AND FINANCE (DAF)
Office Telephone:	+254(020) 2219929, 3341639, 3343672
Official Email:	brian.muganda@tukenya.ac.ke
Consultation Hours:	8AM-5PM MON - FRI

EDUCATION

LEVEL	QUALIFICATION NAME	INSTITUTION	YEAR
Doctor of Philosophy (PhD)	MATHEMATICAL SCIENCES	STRATHMORE UNIVERSITY(Kenya)	2023
Masters of Science (M.Sc.)	COMPUTING AND INFORMATION SYSTEMS	STRATHMORE UNIVERSITY(Kenya)	2020
Masters of Science (M.Sc.)	MATHEMATICAL FINANCE	STRATHMORE UNIVERSITY(Kenya)	2018
Bachelor of Science (BSc)	FINANCIAL ECONOMICS	STRATHMORE UNIVERSITY(Kenya)	2016
O level/Equivalent	KENYA CERTIFICATE OF SECONDARY EDUCATION	STRATHMORE SCHOOL(Kenya)	2011

GENERAL STATEMENT ON RESEARCH AREAS

Probability Modelling, Stochastic Analysis, Quantitative Finance, Algorithmic Learning, High Performance Computing, Artificial Intelligence in Finance

CURRENT RESEARCH PROJECTS

Alternative Approaches for Derivatives Pricing	Financial Engineering, Risk Management, Applied Probability Modelling, Stochastic Finance
Accelerating Financial Computing on GPU-CPU Heterogeneous Architecture	GPU Acceleration, Parallel Financial Computing, High Performance Computing
Financial Modelling and Portfolio Optimization under Leptokurticity	Applied Probability Modelling, Stochastic Finance, Portfolio Allocation

SELECTED PUBLICATIONS

TITLE	LINK TO PUBLICATION	YEAR
Modelling Asymmetric Dependence in Stochastic Volatility and Option Pricing: A Conditional Copula Approach	View online	
A Hybrid Predictive Prototype for Portfolio Selection Using Probability-based Quadratic Programming and Ensemble Artificial Neural Networks	View online	
Parallelization and Acceleration of Dynamic Option Pricing Models on GPU-CPU Heterogeneous Systems	View online	
Parallel Programming for Portfolio Optimization: A Robo-advisor Prototype using Genetic Algorithms with Recurrent Neural Networks	View online	
Exotic Derivatives Pricing Using Copula-based Martingale Approach, 2018	View online	
Firm-level Heterogeneity for Profitability and Competitive Advantage, 2016	View online	
A Decentralized Educational Prediction Market for Information Aggregation, Ideas Generation and Forecasting, 2020	View online	
A Dynamic Parallel and Distributed Algorithm for Derivatives Pricing and Hedging, 2019	View online	